

DESCRIPTION

Bonding of composites, thermoplastics and metals without any primer application.

PROPERTIES

- 2 component room temperature cure methacrylate adhesive
- Non sagging paste product suitable for vertical applications and to fill irregular joints
- Fast setting product adapted to reduce assembly time
- Excellent behaviour at low temperatures
- Excellent mechanical and thermal performances up to 120 °C
- Product adapted to assemblies involving dissimilar materials
- Excellent strength to dynamic loads (vibrations and impacts)
- Product adapted to stringent ageing and aggressive environments
- Product adapted to assemblies with less than ideal surface preparation

PHYSICAL PROPERTIES				
Composition		ADHESIVE	ACTIVATOR	MIXED
Mix ratio by weight		100	100	
Mix ratio by volume at 25 °C		100	100	
Colour		off-white	off-white	off-white
Specific gravity at 25 °C		0.98 – 1.02	0.98 – 1.02	0.98 – 1.02
Open time on film at 23 °C (min)	AXSON method	-	-	10
Handling time at 23 °C* (min)	AXSON method	-	-	30-45

THERMAL AND MECHANICAL PROPERTIES			
Tensile strength	ASTM D638	MPa	20 to 23
Elongation at break	ASTM D638	%	43
Elasticity Modulus	ASTM D638	MPa	1400 to 1700
Working temperature	-	°C	-50 °C ;+100 °C

* Handling time is defined as the time needed to obtain Lap Shear Strength on Aluminium, at 23 °C of 1 MPa.

EQUIPMENT

ADEKIT A 310-1 packaged in 50 ml and 400 ml cartridges requires a manual or pneumatic gun. Please consult our technical department for applications needing a machine.

SUBSTRATE PREPARATION

The item to be bonded must be free of all dirt, oil or other foreign matter. A clean, dry surface is a must. Consult our Technical Support and refer to the technical data sheet about surface preparations to choose adapted degreaser or cleaner

MECHANICAL PROPERTIES ON ASSEMBLIES (1)				
Lap Shear Strength		ISO 4587	MPA	
<i>Aluminium 2017A sandblasted</i>	at 23°C			20 - 25 CF
	after moist cataplasma at 70°C and 100% RH: 1 week			20 - 25 CF/AF
<i>Inox 304 sandblasted</i>	at 23°C			21 CF
<i>Electrogalvanised Steel sandblasted</i>	at 23°C			16 CF
	after moist cataplasma at 70°C and 100% RH: 1 week			16 CF
<i>Polycarbonate</i>	at 23°C			7 SF
<i>ABS</i>	at 23°C			6 SF
<i>PMMA</i>	at 23°C			6 SF
<i>Pre-preg Carbone Composite</i>	at 23°C			8 SD
Floating roller Peel strength		ISO 4578	KN/m	
<i>Aluminium 2017A sandblasted</i>	at 23°C			8

(1) Curing conditions: 24H at room temperature

CF: Cohesive Failure SF: Substrate Failure
AF: Adhesion Failure SD: Substrate Delamination

HANDLING PRECAUTIONS

Normal health and safety precautions should be observed when handling these products :

- ensure good ventilation,
- wear gloves, safety glasses and waterproof clothes.

For further information, please consult the product safety data sheet.

STORAGE CONDITIONS

Shelf life of ADEKIT A 310-1 is 6 months maximum in its original unopened packaging at a temperature between 15°C and 23°C. An extended exposure to higher temperature than 23°C will reduce product shelf life.

PACKAGING

ADEKIT A 310-1 / 50cc Box of 10 cartridges	ADEKIT A 310-1 / 400 cc Box of 10 cartridges
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GUARANTEE

The information contained in this technical data sheet result from research and tests conducted in our Laboratories under precise conditions. It is the responsibility of the user to determine the suitability of AXSON products, under their own conditions before commencing with the proposed application. AXSON guarantee the conformity of their products with their specifications but cannot guarantee the compatibility of a product with any particular application. AXSON disclaim all responsibility for damage from any incident which results from the use of these products. The responsibility of AXSON is strictly limited to reimbursement or replacement of products which do not comply with the published specifications.